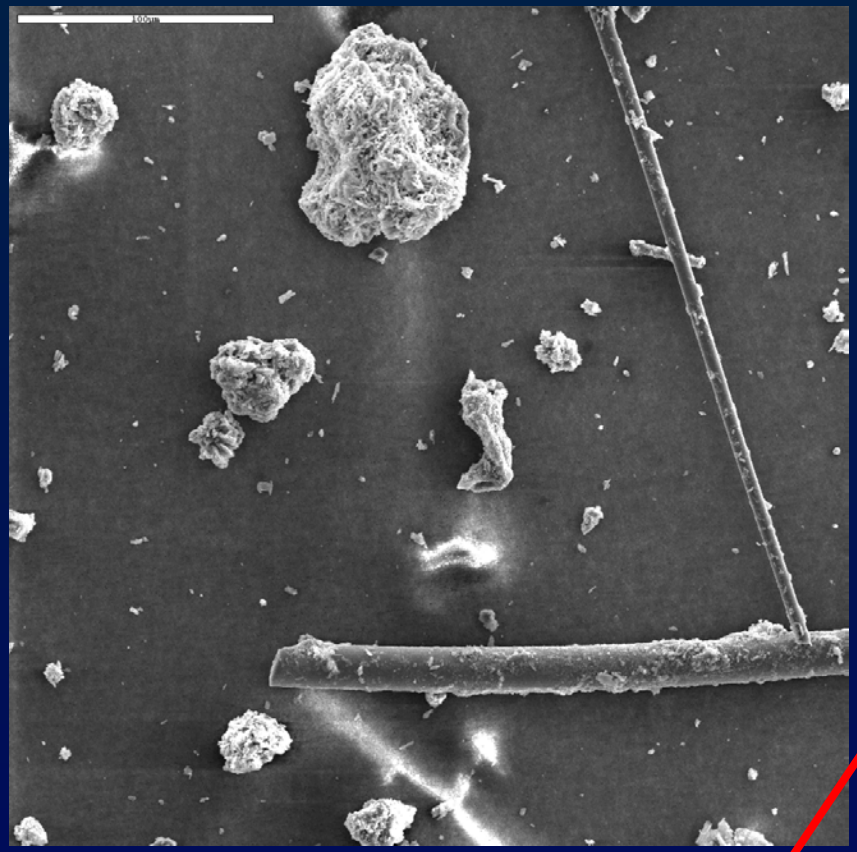
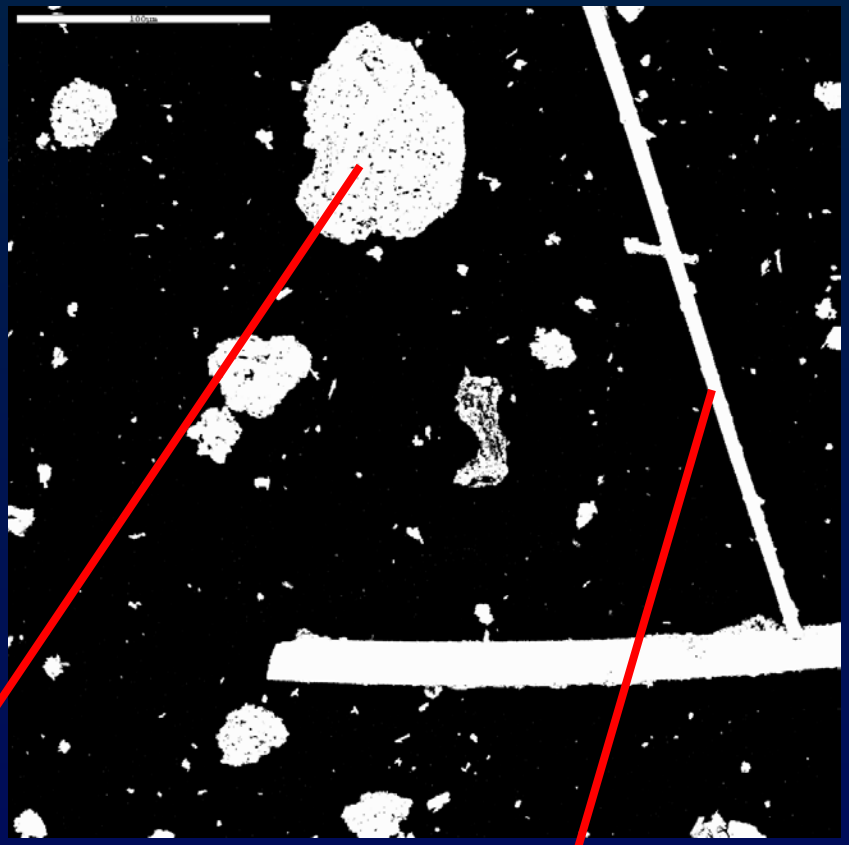
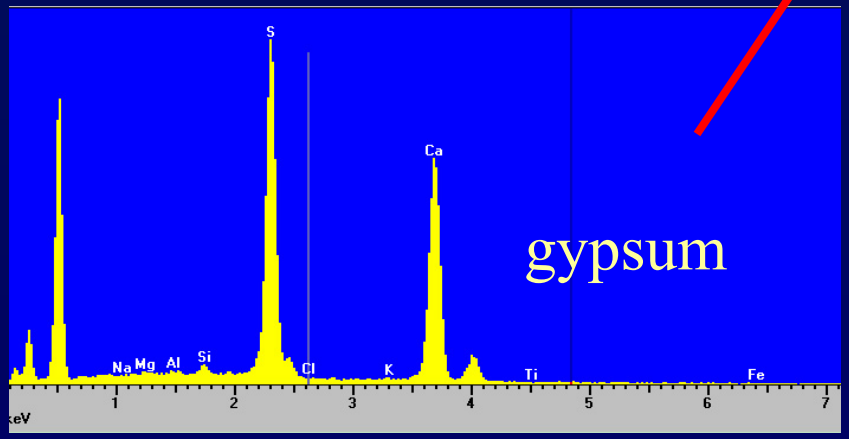
Signature study preliminary results

Sample Preparation

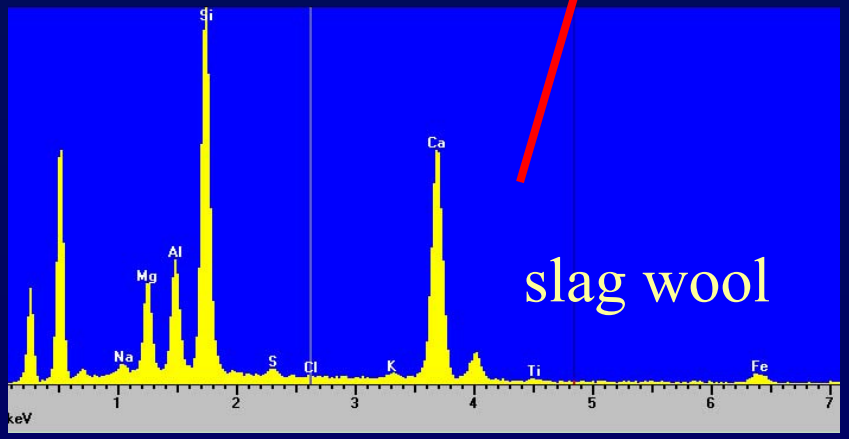
- ~0.25 g of sample were sieved to <150 μm.
- Sample fraction >150 μm is archived.
- <150 μm fraction weight is recorded and sample placed in 60 mL of isopropanol.
- Mixture is suspended using a magnetic stirring bar and collected in three 15 μL increments (45 μL total) by an Eppindorf pipette with the tip trimmed to 500 μm opening.
- The 45 μL aliquot is filtered through a pre-coated MCE filter (0.45 μm pore size).
- The filter containing the sample is then placed on an SEM stub with carbon adhesive tab, the edges of the filter trimmed, and carbon coated for SEM analysis.





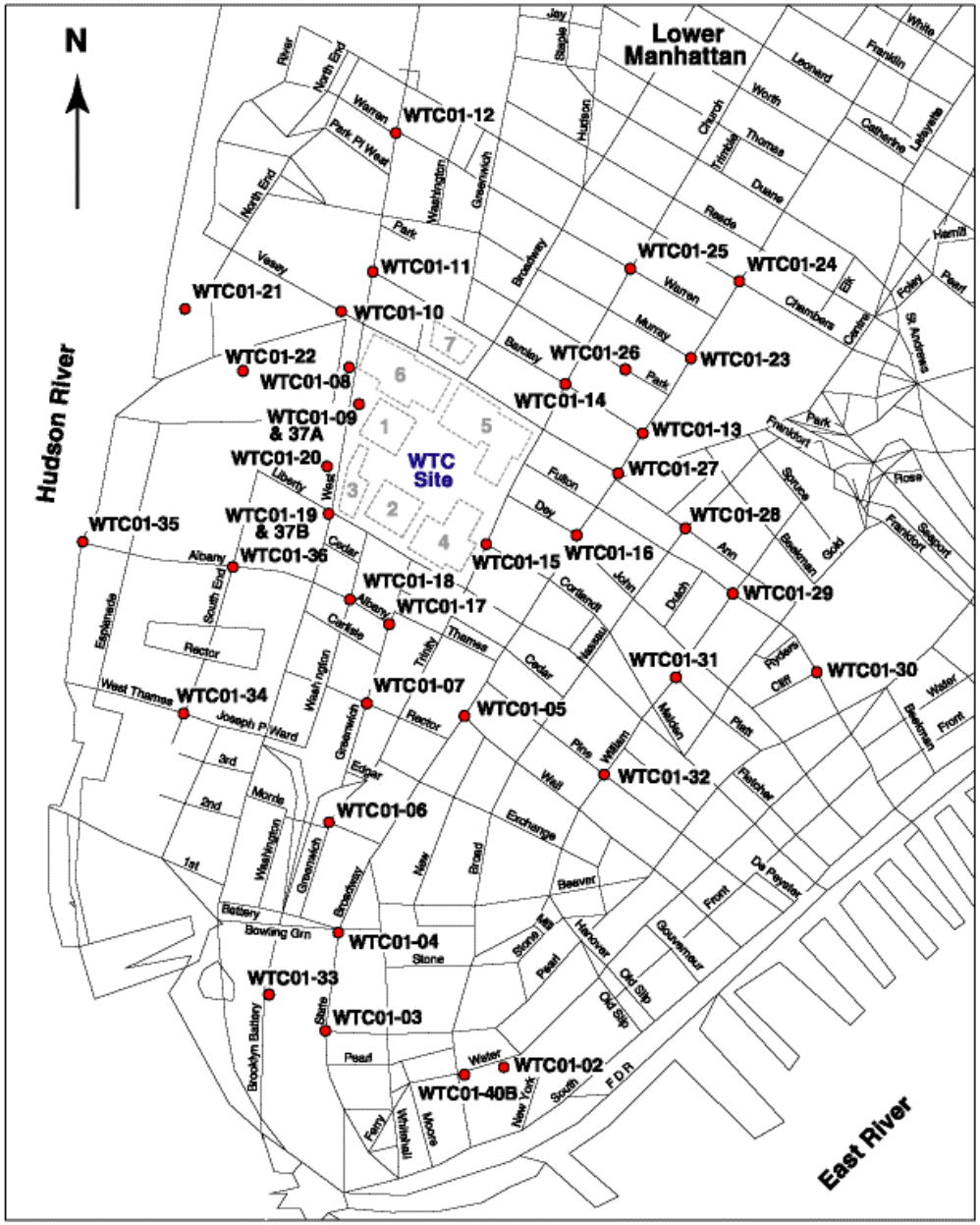


gypsum



slag wool

U.S. Geological Survey **World Trade Center Sample Locations**

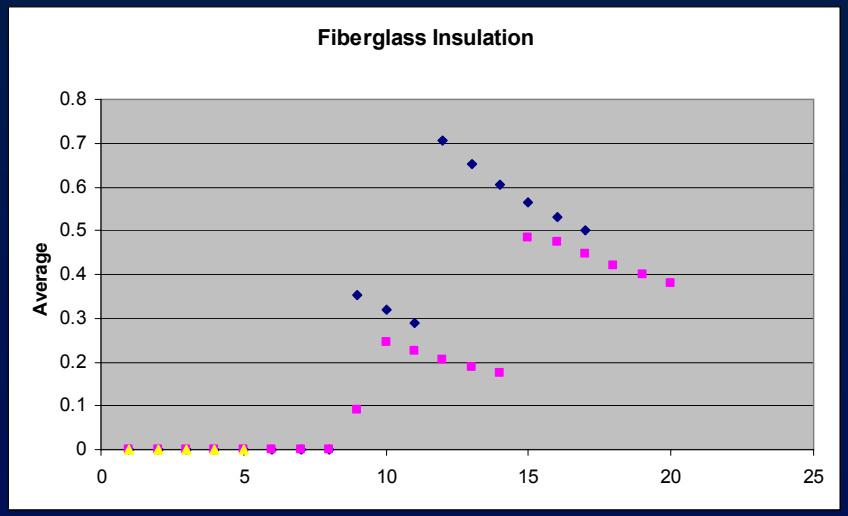


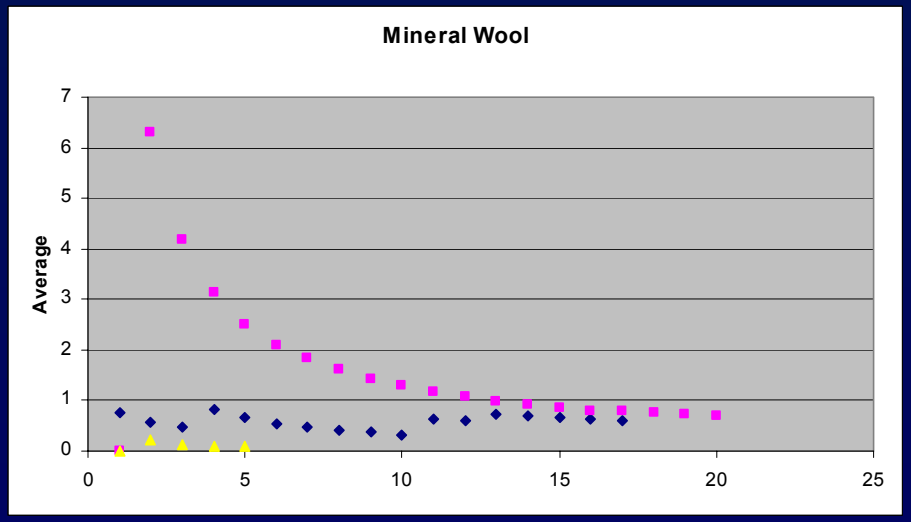
0 0.1 0.2 0.3 0.4 Kilometers

0 0.1 0.2 0.3 0.4 Miles

Base Map Source: 2000 U.S. Census TIGER / Line Data for New York County

MMVF Greater Than 3 Microns





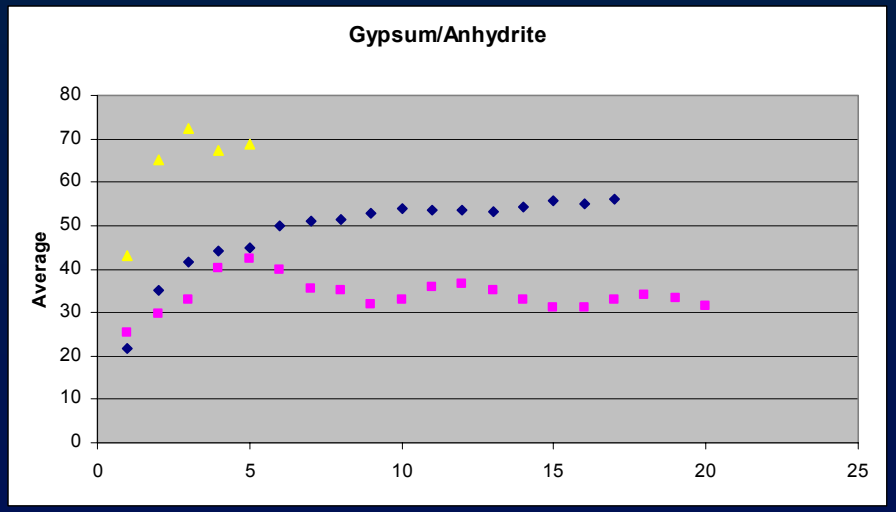
Slag wool 90 % confidence at 20 fields

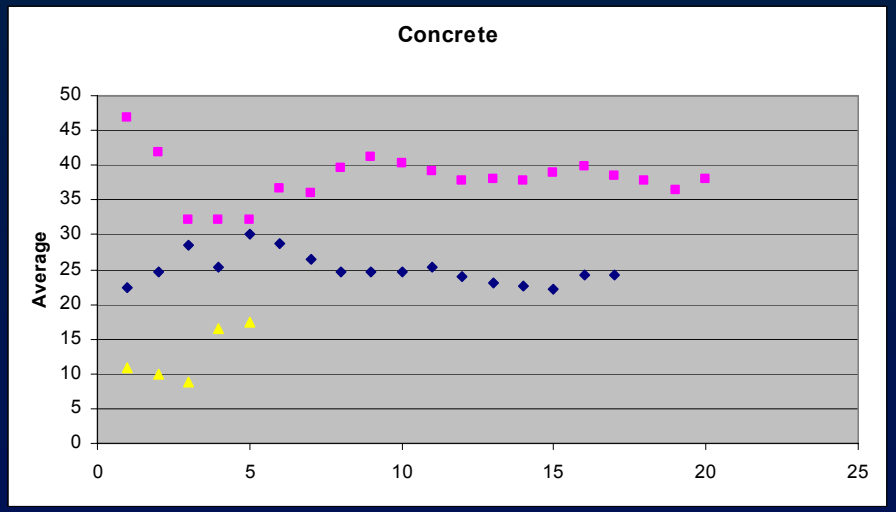
9.61-22.07 %

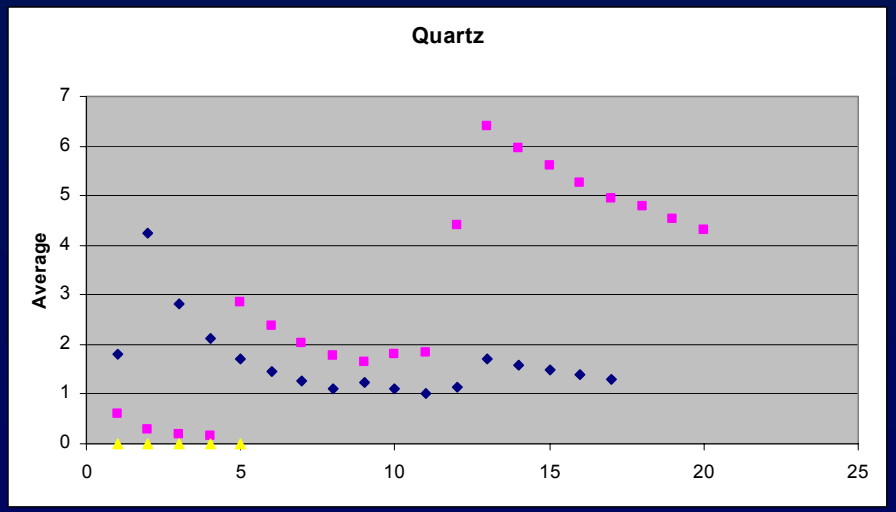
Test samples 500X

Draft data

Particles Greater Than 3 Microns







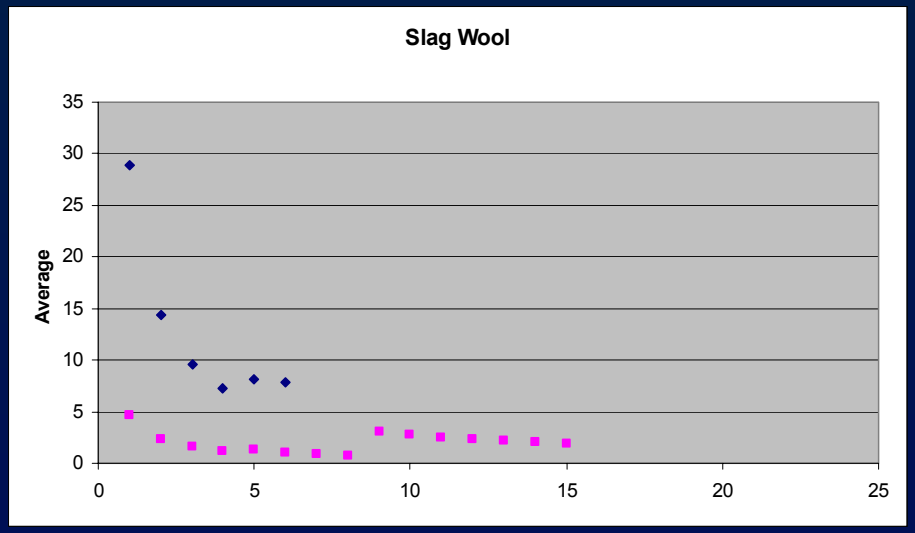
Gypsum/anhydrite 90 % confidence

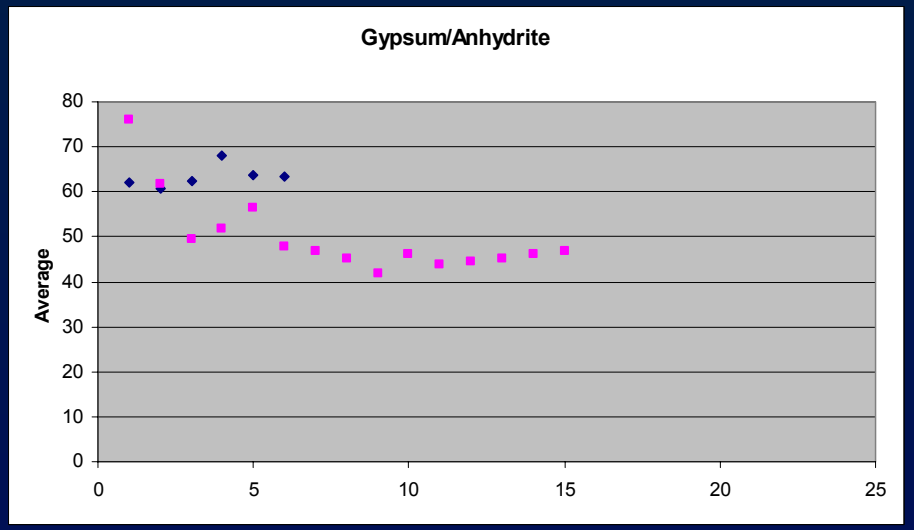
24.27-38.90 %

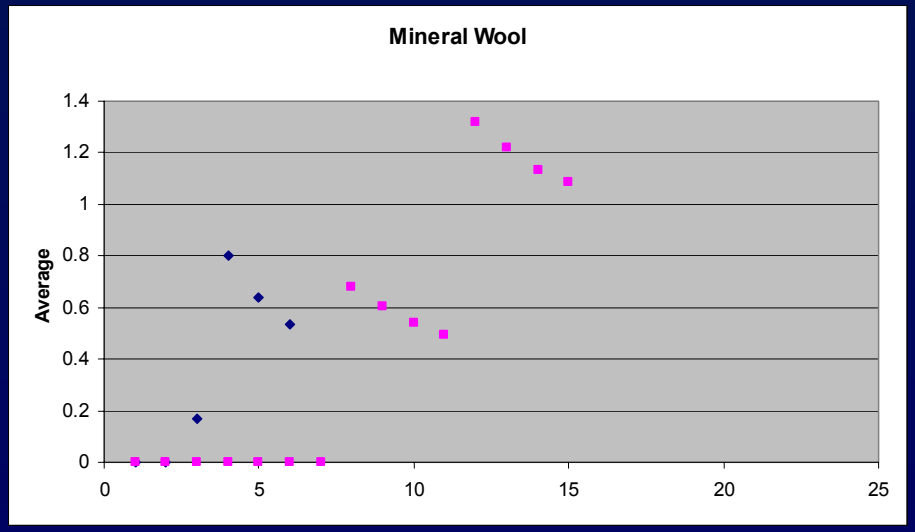
Test samples 500X

Draft data

Particles Less Than 3 Microns







Test samples 2000X

Draft data